

III. REMARKS/ARGUMENTS

A. Status of the Application

Claims 106 – 134 are added. Claims 33, 40, 47, 49, 53 – 55, 58, 61 – 62 and 65 are amended. Claims 1 – 32, 37 – 39, 48, 50 – 52, 56 – 57, 59 – 60, 63 – 64 and 66 – 105 are cancelled. Thus, claims 33 – 36, 40 – 47, 49, 53 – 55, 58, 61 – 62, 65 and 106 – 134 are now pending. The amendments to the claims and the cancellation of claims were not made in response to any rejections raised in the current Office Action. Rather, the amendments to the claims and cancellation of claims were made to enhance the Applicants' patent portfolio with claims of varying scope. Applicants' patent portfolio regarding the current subject matter is such that diversity of claims is commercially advantageous for the Applicants.

Reconsideration of this application in light of the following remarks is respectfully requested.

B. Restriction Requirement under 35 U.S.C. § 121

Restriction to one of the following inventions was required:

Group I. Claims 1 – 32, drawn to a method for displacing fluid, classified in class 166, subclass 312.

Group II. Claims 33 – 105, drawn to a treating fluid (and methods of treating a well bore with this fluid), classified in class 507, subclass 269.

Applicants hereby affirm the election of Group II, claims 33 – 105. Claims 1 – 32 are canceled herein without disclaimer or prejudice, as Applicants may pursue the subject matter of claims 1 – 32 in related applications.

C. Election of Species Requirement under 35 U.S.C. § 121

Election of a single disclosed species in each of the following groups was required:

Species Group I: zeolites (claims 39, 40, 77 and 78)

Species Group II: polymers (claims 52 and 90)

Species Group III: dispersants (claims 58 and 96)

Species Group IV: surfactants (claims 61, 62, 99 and 100)

Applicants hereby affirm the election of: (I) the zeolite clinoptilolite; (II) the polymer hydroxyethyl cellulose; (III) the dispersant sodium naphthalene sulfonate condensed with formaldehyde; and (IV) the surfactant species (f) of claims 62 and 100 (a specified ethoxylated alcohol ether sulfate).

Applicants submit the following listing of claims as readable on the elected species:

Species Group I: claims 33 – 36, 40 – 47, 49, 53 – 55, 58, 61 – 62, 65 and 106 – 134

Species Group II: claims 33 – 36, 40 – 47, 49, 53 – 55, 58, 61 – 62, 65 and 117

Species Group III: claims 106 – 120 and 58

Species Group IV: claims 121 – 134, 62 and 119

D. Information Disclosure Statement

The Examiner did not consider French reference 763,998 listed on the form 1449 received on May 12, 2004. A Supplemental Information Disclosure Statement, modified Form 1449, and an English translation of said French reference are enclosed.

E. Rejection of Claims under 35 U.S.C. § 112, second paragraph

1. Claims 37, 47 – 48, 50 – 51, 75, 85 – 86, and 88 – 89

Claims 37, 47 – 48, 50 – 51, 75, 85 – 86, and 88 – 89 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly containing overlap. Specifically, the Examiner has alleged that zeolite may be considered a viscosifier, a colloidal agent or a clay. The present rejection and interpretation of claims 37, 47 – 48, 50 – 51, 75, 85 – 86, and 88 – 89 is respectfully traversed.

Claims 37, 48, 50 – 51, 75, 85 – 86, and 88 – 89 have been canceled for reasons unrelated to the present rejection.

The remaining claim, namely, claim 47, describes a treating fluid composition that includes a zeolite, a polymer, a carrier fluid, and at least one of diatomaceous earth and clay. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose,

methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose and hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

As to the allegation that zeolite may be considered a clay, Applicants respectfully submit that one of ordinary skill in the art recognizes clays and zeolites as distinct groups of minerals. The term "zeolite" and the term "clay" are not considered synonymous by those of ordinary skill in the art. (See attached *Exhibit A*, definition of clay from Schlumberger's Oilfield Glossary, from which any reference or listing of zeolite is notably absent). The Examiner has not offered any evidence that one of ordinary skill in the art would consider the description "zeolite" to be interchangeable with the description "clay".

In view of the foregoing, Applicants respectfully submit that the rejection of claim 48 is improper, and request that it be withdrawn.

2. Claims 39 and 77

Claims 39 and 77 stand rejected under 35 U.S.C. § 112, second paragraph, for recitation of the formula for zeolites. Specifically, the Examiner has alleged that the parameter "x" is indefinite because no numerical limit is provided. This rejection and interpretation of claims 39 and 77 is respectfully traversed. Those of ordinary skill in the art recognize that the number of moles of water entrained in a zeolite can vary even for a specific type of zeolite because any given zeolite can absorb water from its environment, or lose water to its environment.

Regardless of the traversal of the present rejection of claims 39 and 77, the rejection has been rendered moot by the cancellation of claims 39 and 77 herein, which were canceled for reasons unrelated to the present rejection.

3. Claims 62 and 100

Claims 62 and 100 stand rejected under 35 U.S.C. § 112, second paragraph for recitation of the charge balance in the formula for surfactant type (f). Those of ordinary skill in the art

would recognize that the errors in claims 62 and 100 are typographical errors, and that the superscript “4” in reference to the ammonium ion recited in said formula should be a subscript “4”, and the counter ion is provided by the extra oxygen atom. Applicants have amended claim 62 herein to correct these typographical errors. Claim 100 has been canceled for reasons unrelated to the present rejection. In view of the foregoing, Applicants respectfully request that the rejection of claim 62 be withdrawn.

F. Rejection of Claims under 35 U.S.C. § 102(b) over Kiss

Claims 33 – 40, 43, 44, 47 and 48 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 4,772,307 to Kiss et al. (“Kiss”). This rejection is respectfully traversed.

Claims 37 – 39 and 48 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 36, 40, 43, 44 and 47, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 36, 40, 43, 44 and 47 depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

Applicants note that the indication of allowable subject matter at page 5 of the current Office Action applies to a treating fluid composition that includes the zeolite clinoptilolite and

the polymer hydroxyethylcellulose. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. As claim 33 is allowable when it includes clinoptilolite hydroxyethylcellulose, Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02.

According to MPEP §803.02, following a provisional election of species, a Markush-type claim should be examined fully with respect to the elected species. MPEP §803.02 at p. 800-5. If no prior art is found that anticipates or renders obvious the elected species, then the search of the Markush-type claim will be extended. MPEP §803.02 at p. 800-5. The current Office Action indicates that a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Accordingly, Applicants submit that the remaining zeolites and polymers in the Markush groups are entitled to examination, and to allowability unless a proper rejection can be made.

As indicated in the Office Action, Kiss does not constitute anticipate a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Kiss does not constitute anticipate a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

As provided in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim ...". Kiss fails to satisfy the requirements of MPEP § 2131 because Kiss does not disclose each and every element of claims 34 – 36, 40, 43, 44 and 47.

Kiss describes a process for preparing an agricultural fertilizer by contacting contaminated water with an agent that removes suspended solids. (col 9, lines 25 – 30). The agent contains a minimum of 50% by mass of a granulated rock, which granulated rock contains at least 25% by mass of the zeolites clinoptilolite and/or mordenite. (col. 7, lines 25 – 30).

The Examiner has stated that Kiss describes zeolite suspended in a sewage sludge, which the Examiner has equated to a carrier fluid. Applicants respectfully submit that those of ordinary skill in the art know that well treatment fluids are carefully designed and selected for performance in a well. There simply could not be an expectation that sewage sludge as described by Kiss could be a carrier fluid as recited in claim 33.

The Examiner has further stated the sewage sludge would “inherently contain organic polymers/viscosifiers/colloids.” Applicants respectfully submit that there support required by MPEP §2100 (at p. 2100-57) for the conclusion in the Office Action that the sewage sludge of Kiss “inherently” contains an organic polymer, a viscosifier or a colloid is not provided.

Moreover, claims 34 – 36, 40, 43, 44 and 47 require a specific zeolite selected from the recited group and a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Kiss for a treating fluid composition that includes a zeolite selected from the recited group, a specific polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants submit that Kiss fails to disclose each and every element of claim 33, and therefore the present rejection of claim 33 under 35 USC § 102(b) should be withdrawn. Applicants further submit that the present rejection of claims 34 – 36, 40, 43, 44 and 47 under 35 USC § 102(b) should be withdrawn for at least the same reasons that apply to claim 33.

G. Rejection of Claims under 35 U.S.C. § 102(b) over Cross

Claims 33 – 41, 43 – 45, 50, 68 – 79, 81 – 83, 85 – 86 and 88 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 2,094,316 to Cross et al. (“Cross”). This rejection is respectfully traversed.

Claims 37 – 39, 50, 68 – 79, 81 – 83, 85 – 86 and 88 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 36, 40 – 41, and 43 – 45, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums,

tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 36, 40 – 41 and 43 – 45 depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Cross does not constitute anticipating prior art with respect to a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Cross does not constitute anticipating prior art with respect to a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

As provided in MPEP § 2131, “[t]o anticipate a claim, the reference must teach every element of the claim ...”. Cross fails to satisfy the requirements of MPEP § 2131 because Cross fails to disclose each and every element of claims 33 – 36, 40 – 41 and 43 – 45.

Cross describes drilling muds that contain from 1% to 10% of a clay that contains a large amount of base exchange zeolite. (Page 1, line 23 – 32). Cross refers to such a clay as a “zeolitic clay.” However, Cross fails to describe the type of zeolite present in the clay. Moreover, selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Cross because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

Further still, as of 2002, the JCPDS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. The JCPDS – International Centre for Diffraction Data is the means known to those of ordinary skill in the art by which zeolites are identified. A copy of the Zeolite and Molecular Sieve Index from the 2002 edition of the JCPDS – International Centre for Diffraction Data is enclosed at *Exhibit B*. Of the numerous possibilities, selection of the zeolite as described in claims 33 – 36, 40 – 41, and 43 – 45 would not have been an obvious or routine design choice.

Moreover, claims 33 – 36, 40 – 41, and 43 – 45 require a specific zeolite selected from the recited group and a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Cross for a treating fluid composition that includes a specific zeolite selected from the recited group, a specific polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Cross fails to disclose each and every element of claim 33, and therefore the present rejection of claim 33 under 35 USC § 102(b) should be withdrawn. Applicants further submit that the present rejection of claims 34 – 36, 40 – 41, and 43 – 45 under 35 USC § 102(b) over Cross should be withdrawn for at least the same reasons that apply to claim 33.

H. Rejection of Claims under 35 U.S.C. § 102(b) over Mueller

Claims 33 – 39, 43 – 44, 47 – 48, 52 – 56, 68 – 77, 81 – 82, 85 – 86 and 90 – 94 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 4,888,120 to Mueller et al. (“Mueller”). This rejection is respectfully traversed.

Claims 37 – 39, 48, 52, 56, 68 – 77, 81 – 82, 85 – 86 and 90 – 94 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 36, 43 – 44, 47 and 53 – 55, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of

hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 36, 43 – 44, 47 and 53 – 55, depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Mueller does not constitute anticipating prior art with respect to a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Mueller does not constitute anticipating prior art with respect to a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

As provided in MPEP § 2131, “[t]o anticipate a claim, the reference must teach every element of the claim ...”. Mueller fails to satisfy the requirements of MPEP § 2131 because Mueller fails to disclose each and every element of claims 33 – 36, 43 – 44, 47 and 53 – 55.

Mueller describes water-based well fluids that contain a layered silicate. (Abstract.) The well fluids according to Mueller may also contain a finely divided zeolite compound, specifically the synthetic zeolite referred to as NaA. (col 4., line 43). However, Mueller is completely devoid of disclosure of the zeolites recited in the Markush group of claim 33. As

noted above; selection of the zeolites recited in claim 33 would not be an obvious or routine design choice.

Moreover, claims 33 – 36, 43 – 44, 47 and 53 – 55 require a specific zeolite selected from the recited group and a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Mueller for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Mueller fails to disclose each and every element of claim 33, and therefore the present rejection of claim 33 under 35 USC § 102(b) should be withdrawn. Applicants further submit that the present rejection of claims 34 – 36, 43 – 44, 47 and 53 – 55 under 35 USC § 102(b) over Mueller should be withdrawn for at least the same reasons that apply to claim 33.

I. Rejection of Claims under 35 U.S.C. § 102(b) over Terry

Claims 33 – 35, 37 – 39, 41 – 50, 52 – 56, 65, 68 – 73, 75 – 77, 79 – 88, 90 – 94 and 103 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,711,383 to Terry (“Terry”). This rejection is respectfully traversed.

Claims 37 – 39, 48, 52, 56, 68 – 73, 75 – 77, 79 – 88, 90 – 94 and 103 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35, 41 – 47, 53 – 55 and 65, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar,

carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 35, 41 – 47, 53 – 55 and 65, depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Terry does not constitute anticipating prior art with respect to a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Terry does not constitute anticipating prior art with respect to a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

As provided in MPEP § 2131, “[t]o anticipate a claim, the reference must teach every element of the claim ...”. Terry fails to satisfy the requirements of MPEP § 2131 because Terry fails to disclose each and every element of claims 33 – 35, 41 – 47, 53 – 55 and 65.

Terry describes a drilling fluid comprising water, a water viscosity increasing material and a cementitious material. (col. 2, lines 65 – 66). In certain embodiments, the cementitious material comprises a silicious-containing substance, an example of which is zeolite. (col. 4, lines 18 – 22). However, Terry is completely devoid of disclosure as to the type of zeolite, and more particularly, to the specific zeolites recited in the Markush group of claim 33.

Moreover, selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Terry because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claims 33 – 36, 43 – 44, 47 and 53 – 55 would not have been an obvious or routine design choice.

Moreover, claims 33 – 36, 43 – 44, 47 and 53 – 55 require a specific zeolite selected from the recited group and a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Terry for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Terry fails to disclose each and every element of claim 33, and therefore the present rejection of claim 33 under 35 USC § 102(b) should be withdrawn. Applicants further submit that the present rejection of claims 34 – 35, 41 – 47, 53 – 55 and 65 under 35 USC § 102(b) over Terry should be withdrawn for at least the same reasons that apply to claim 33.

J. Rejection of Claims under 35 U.S.C. § 102(b) over Roddy

Claims 33 – 35, 37 – 39, 43 – 44, 61 – 64, 68 – 73, 75 – 77, 81 – 82 and 99 – 102 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 6,457,524 to Roddy (“Roddy”). This rejection is respectfully traversed.

Claims 37 – 39, 63 – 64, 68 – 73, 75 – 77, 81 – 82 and 99 – 102 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35, 43 – 44 and 61 – 62, Applicants note that Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar

gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 35, 43 – 44 and 61 – 62 depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Roddy does not constitute anticipating prior art with respect to a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Roddy does not constitute anticipating prior art with respect to a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

As provided in MPEP § 2131, “[t]o anticipate a claim, the reference must teach every element of the claim ...”. Roddy fails to satisfy the requirements of MPEP § 2131 because Roddy fails to disclose each and every element of claims 33 – 35, 43 – 44 and 61 – 62.

Roddy discloses cement compositions that include cement and a flow enhancing additive, and methods for the use of such compositions. The flow enhancing additive is a particulate solid material with a flow inducing polar chemical absorbed thereon. In one example, the particulate solid material can be zeolite, and the zeolite carries the flow inducing polar chemical. (Col. 4, lines 38 – 42).

However, Roddy is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolites recited in claim 33. Moreover, claims 33 – 35, 43 – 44 and 61 – 62 require a zeolite selected from the recited group and a polymer selected from the recited group.

There is no disclosure, motivation or suggestion in Roddy for a treating fluid composition that includes a zeolite and a polymer selected from the groups recited in claim 33, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Roddy fails to disclose each and every element of claim 33, and therefore the present rejection of claim 33 under 35 USC § 102(b) should be withdrawn. Applicants further submit that the present rejection of claims 33 – 35, 43 – 44 and 61 – 62 under 35 USC § 102(b) over Roddy should be withdrawn for at least the same reasons that apply to claim 33.

K. Rejection of Claims under 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) over Sobolev

Claims 33 – 35, 37 – 39, 43 – 44, 47 – 48, 52 – 56, 58, 68 – 73, 75 – 77, 81 – 82, 85 – 86, 90 – 94 and 96 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) over patent publication no. WO 98/54108, applied for by Sobolev et al. (“Sobolev”). This rejection is respectfully traversed.

Claims 37 – 39, 48, 52, 56, 68 – 73, 75 – 77, 81 – 82, 85 – 86, 90 – 94 and 96 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35, 43 – 44, 47, 53 – 55 and 58, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 35, 43 – 44, 47, 53 – 55 and 58 depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Sobolev does not anticipate or render obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Sobolev does not anticipate or render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

In order to make a proper rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a), it is required that the cited reference disclose, motivate or suggest each and every element of the rejected claim. (See MPEP § 2131 and MPEP § 2142).

To sustain a rejection under 35 U.S.C. 103(a), MPEP § 2142 further requires “some suggestion or motivation, either in the [reference itself] or in the knowledge generally available to one of ordinary skill in the art, to modify [or combine] the reference”, and also that there be a “reasonable expectation of success.”

In the present case, none of the criteria for sustaining a rejection over Sobolev under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a), have been satisfied with respect to any of claims 33 – 35, 43 – 44, 47, 53 – 55 and 58.

Sobolev discloses an admixture for a cement system. (Abstract.) The admixture consists of a water reducer solution and a sorbent, which must be a fine alkali reactive silica dioxide based material. (page 3, lines 30 – 31). In certain examples, the sorbent could be zeolite. (page 3, line 33).

However, Sobolev is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolites recited in the Markush group of claim 33. Selection of a zeolite as

recited in the claim 33 would not be suggested or motivated by the disclosure of Sobolev because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claims 33 – 35, 43 – 44, 47, 53 – 55 and 58 would not have been an obvious or routine design choice.

Moreover, claims 33 – 35, 43 – 44, 47, 53 – 55 and 58 require a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Sobolev for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Sobolev fails to disclose each and every element of claim 33, and therefore a required element of both a rejection under 35 U.S.C. § 102(b) and a rejection under 35 U.S.C. 103(a) has not been met.

Further, Sobolev fails to suggest or motivate a modification of his disclosure so as to provide a treating fluid composition as recited in claim 33. Neither Sobolev nor the current Office Action describes how a person of ordinary skill in the art could be motivated to modify the cement admixture described by Sobolev to provide a treating fluid as recited in claim 33. Further, there could be no reasonable expectation of success of providing such a treating fluid composition from the disclosure of Sobolev for at least the reason that there is no suggestion or motivation for modification of the disclosure of Sobolev. Moreover, a reasonable expectation of success for modifying an additive for a cement composition to provide a treating fluid composition as recited in the claims has not been provided. Accordingly, Applicants submit that Sobolev fails to satisfy the remaining requirements of a rejection of claim 33 under 35 U.S.C. 103(a).

In view of the foregoing, Applicants respectfully submit that none of the criteria for sustaining a rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) have been satisfied with respect to claim 33. Moreover, none of the criteria for sustaining a rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) have been satisfied with respect to claims 34 – 35, 43 – 44, 47, 53 – 55 and 58 for at least the same reasons that apply to claim 33.

L. Rejection of Claims under 35 U.S.C. § 102(b), or 35 U.S.C. 103(a), over Reddy

Claims 33 – 35, 37 – 39, 58, 68 – 73, 75 – 77, and 96 stand rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. 103(a) over U.S. Patent No. 6,209,646 to Reddy et al. (“Reddy”). This rejection is respectfully traversed.

Claims 37 – 39, 68 – 73, 75 – 77, and 96 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35 and 58, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 35 and 58 depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is

allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Reddy does not constitute prior art that anticipates or renders obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Reddy does not anticipate or render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

In order to make a proper rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a), it is required that the cited reference disclose, motivate or suggest each and every element of the rejected claim. (See MPEP § 2131 and MPEP § 2142).

To sustain a rejection under 35 U.S.C. 103(a), MPEP § 2142 further requires “some suggestion or motivation, either in the [reference itself] or in the knowledge generally available to one of ordinary skill in the art, to modify [or combine] the reference”, and also that there be a “reasonable expectation of success.”

In the present case, none of the criteria for sustaining a rejection over Reddy under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a), have been satisfied with respect to any of claims 33 – 35 and 58.

Reddy discloses a method of controlling the release rate of an additive in a treating fluid. (Abstract.) The additive is absorbed into a particulate porous solid material, which is then combined with a treating fluid. The particulate porous solid material slows the release rate of the additive upon combination with the treating fluid. (col. 3, lines 23 – 25). Examples of a suitable particulate porous solid material include zeolites. (col. 3, line 36).

However, Reddy is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolites recited in claim 33. Selection of a zeolite as recited in claim 33 would not be suggested or motivated by the disclosure of Reddy because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for

synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claim 33 would not have been an obvious or routine design choice.

Moreover, claim 33 requires a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Reddy for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Reddy fails to disclose each and every element of claim 33, and therefore a required element of both a rejection under 35 U.S.C. § 102(b) and a rejection under 35 U.S.C. 103(a) has not been met.

Further, Reddy fails to suggest or motivate a modification of his disclosure so as to provide a treating fluid composition as recited in claim 33. Neither Reddy nor the current Office Action describes how a person of ordinary skill in the art could be motivated to modify the disclosure of Reddy to provide a treating fluid as recited in the current claims. Further, there could be no reasonable expectation of success of providing such a treating fluid composition from the disclosure of Reddy for at least the reason that there is no suggestion or motivation for modification of the disclosure of Reddy. Moreover, a reasonable expectation of success for modifying an additive for a cement composition to provide a treating fluid composition as recited in the claims has not been provided. Accordingly, Applicants submit that Reddy fails to satisfy the remaining requirements of a rejection under 35 U.S.C. 103(a).

In view of the foregoing, Applicants respectfully submit that none of the criteria for sustaining a rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) have been satisfied with respect to claim 33. Moreover, none of the criteria for sustaining a rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) have been satisfied with respect to claims 34 – 35 and 58 for at least the same reasons that apply to claim 33.

M. Rejection of Claims under 35 U.S.C. § 102(b), or 35 U.S.C. 103(a), over Ku

Claims 33 – 35, 37 – 40, 43 – 44, 50 – 51 stand rejected under 35 U.S.C. § 102(b) or, in the alternative, under 35 U.S.C. 103(a) over U.S. Patent Application Publication 2002/0117090 to Ku. (“Ku”). This rejection is respectfully traversed.

Claims 37 – 39 and 50 – 51 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35, 40, and 43 – 44, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums; tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Each of claims 34 – 35, 40 and 43 – 44 depends directly or indirectly from claim 33, and therefore each includes at least the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Reddy does not constitute prior art that anticipates or renders obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Reddy does not anticipate or render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

In order to make a proper rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a), it is required that the cited reference disclose, motivate or suggest each and every element of the rejected claim. (See MPEP § 2131 and MPEP § 2142).

To sustain a rejection under 35 U.S.C. 103(a), MPEP § 2142 further requires “some suggestion or motivation, either in the [reference itself] or in the knowledge generally available to one of ordinary skill in the art, to modify [or combine] the reference”, and also that there be a “reasonable expectation of success.”

In the present case, none of the criteria for sustaining a rejection over Ku under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a), have been satisfied with respect to any of claims 33 – 35, 40 and 43 – 44.

Ku discloses a concrete formulation for use in the construction of buildings, in which zeolite replaces at least a part of the cement that would have been used to form the concrete. (col. 1, paras. [0001], [0017]).

However, Ku is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolites recited in claim 33. Selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Ku because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications. In particular, the composition described by Ku would require properties suitable for use in construction, whereas the composition described by claims 33 – 35, 40 and 43 – 44 would require properties suitable for treating a wellbore.

As noted above, as of 2002, the JCPDS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77

subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claims 33 – 35, 40 and 43 – 44 would not have been an obvious or routine design choice.

Moreover, claims 33 – 35, 40 and 43 – 44 require a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Ku for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Ku fails to disclose each and every element of claim 33, and therefore a required element of both a rejection under 35 U.S.C. § 102(b) and a rejection under 35 U.S.C. 103(a) has not been met.

Further, Ku fails to suggest or motivate a modification of his disclosure so as to provide a treating fluid composition as recited in claim 33. Neither Ku nor the current Office Action describes how a person of ordinary skill in the art could be motivated to modify the disclosure of Ku to provide a treating fluid as recited in the claim 33. Further, there could be no reasonable expectation of success of providing such a treating fluid composition from the disclosure of Ku for at least the reason that there is no suggestion or motivation for modification of the disclosure of Ku. Moreover, a reasonable expectation of success for modifying a concrete formulation as described by Ku to provide a treating fluid composition as recited in claim 33 has not been provided. Accordingly, Applicants submit that Ku fails to satisfy the remaining requirements of a rejection of claim 33 under 35 U.S.C. 103(a).

In view of the foregoing, Applicants respectfully submit that none of the criteria for sustaining a rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) have been satisfied with respect to claim 33. Moreover, none of the criteria for sustaining a rejection under either 35 U.S.C. § 102(b) or 35 U.S.C. 103(a) have been satisfied with respect to claims 34 – 35, 40 and 43 – 44 for at least the same reasons that apply to claim 33.

N. Rejection of Claims under 35 U.S.C. § 103(a) over Mueller

Claims 33, 38, 52, 56 – 57, 68, 75 – 76, 89 – 90, and 94 – 95 stand rejected under 35 U.S.C. § 103(a) over Mueller. This rejection is respectfully traversed.

Claims 38, 52, 56 – 57, 68, 75 – 76, 89 – 90, and 94 – 95 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claim, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Mueller does not constitute render obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Mueller does not render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

To sustain a rejection under 35 U.S.C. 103(a), MPEP § 2142 requires three criteria: (a) the cited reference must disclose, motivate or suggest all of the limitations of the rejected claim; (b) there must be some suggestion or motivation, either in the reference itself or in the

knowledge generally available to one of ordinary skill in the art, to modify the reference; and (c) there must be a “reasonable expectation of success.”

Mueller describes water-based well fluids that contain a layered silicate. (Abstract.) The well fluids according to Mueller may also contain a finely divided zeolite compound, specifically the synthetic zeolite referred to as NaA. (col. 4, line 43). However, Mueller is completely devoid of disclosure as to the zeolites recited in the Markush group of claim 33. As noted above, selection of the zeolite recited in claim 33 would not be an obvious or routine design choice.

Moreover, claim 33 requires a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Mueller for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants submit that Mueller fails to disclose, motivate or suggest all of the limitations of claim 33, and therefore fails to satisfy at least one of the criteria for a *prima facie* case of obviousness. Applicants further submit that Mueller fails to satisfy the remaining elements required for sustaining the present rejection. There is no suggestion or motivation, either in Mueller or in the knowledge generally available to one of ordinary skill in the art, to modify Mueller to achieve a treating fluid composition as recited in claim 33.

Further, there could be no reasonable expectation of success that a treating fluid composition as recited in claim 33 could be achieved from the disclosure of Mueller at least for the reason that Mueller contains no suggestion or motivation for such a composition. Accordingly, Applicants submit that Mueller fails to satisfy any of three elements required to sustain a rejection under 35 U.S.C. 103(a), with respect to claim 33.

O. Rejection of Claims under 35 U.S.C. 103(a) over Reddy

Claims 33, 38, 58 – 60, 68, 76 and 96 – 98 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,209,646 to Reddy et al. (“Reddy”). This rejection is respectfully traversed.

Claims 38, 59 – 60, 68, 76 and 96 – 98 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 and 58, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime,

bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 58 depends from claim 33, and therefore includes at least the foregoing elements

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Reddy does not constitute prior art that renders obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Reddy does not render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33.

To sustain a rejection under 35 U.S.C. 103(a), MPEP § 2142 requires three criteria: (a) the cited reference must disclose, motivate or suggest all of the limitations of the rejected claim; (b) there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference; and (c) there must be a “reasonable expectation of success.”

Reddy discloses a method of controlling the release rate of an additive in a treating fluid. (Abstract.) The additive is absorbed into a particulate porous solid material, which is then combined with a treating fluid. The particulate porous solid material slows the release rate of the additive upon combination with the treating fluid. (col. 3, lines 23 – 25). Examples of a suitable particulate porous solid material include zeolites. (col. 3, line 36).

However, Reddy is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolites recited in the Markush group of claim 33. Selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Reddy because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPDS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claim 33 would not have been an obvious or routine design choice.

Moreover, claim 33 requires a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Reddy for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Reddy fails to disclose all of the limitations of claim 33, and therefore a required element of the present rejection under 35 U.S.C. 103(a) has not been met.

Applicants further submit that Reddy fails to satisfy the remaining elements required for sustaining the present rejection. There is no suggestion or motivation, either in Reddy or in the knowledge generally available to one of ordinary skill in the art, to modify Reddy to achieve a treating fluid composition as recited in claim 33.

Further, there could be no reasonable expectation of success that a treating fluid composition as recited in claim 33 could be achieved from the disclosure of Reddy at least for

the reason that Reddy contains no suggestion or motivation for such a composition.

Accordingly, Applicants submit that Reddy fails to satisfy any of three elements required to sustain a rejection under 35 U.S.C. 103(a), with respect to claim 33. Moreover, none of the criteria for sustaining the present rejection of claim 58 under 35 U.S.C. 103(a) have been satisfied for at least the same reasons that apply to claim 33.

P. Rejection of Claims under 35 U.S.C. § 103(a) over Terry

Claims 33, 38, 65 – 68, 76 and 103 – 105 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,711,383 to Terry (“Terry”). This rejection is respectfully traversed.

Claims 38, 66 – 68, 76 and 103 – 105 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 and 65, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 65 depends from claim 33 and therefore includes all of the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33.

Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Terry does not constitute prior art that renders obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Terry does not render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33 because none of the three criteria for sustaining a rejection under 35 U.S.C. 103(a) over Terry have been satisfied with respect to claim 33.

Terry describes a drilling fluid comprising water, a water viscosity increasing material and a cementitious material. (col. 2, lines 65 – 66). In certain embodiments, the cementitious material comprises a silicious-containing substance, an example of which is zeolite. (col. 4, lines 18 – 22).

However, Terry is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolite recited in claim 33. Moreover, selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Terry because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPDS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claim 33 would not have been an obvious or routine design choice.

Moreover, claim 33 requires a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Terry for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Terry fails to disclose, motivate or suggest all of the limitations of claim 33, and therefore a required element of the present rejection under 35 U.S.C. 103(a) over Terry has not been met.

Further, Terry fails to suggest or motivate a modification of his disclosure so as to provide a treating fluid composition as recited in claim 33. Neither Terry nor the current Office Action describes a reason why a person of ordinary skill in the art would modify the treating fluids described by Terry to provide the treating fluids described in claim 33. Further, there could be no reasonable expectation of success of providing such a treating fluid composition from the disclosure of Terry for at least the reason that there is no suggestion or motivation for modification of the disclosure of Terry. Accordingly, Applicants submit that Terry fails to satisfy the remaining requirements of a rejection under 35 U.S.C. 103(a) of claim 33.

In view of the foregoing, Applicants respectfully submit that none of the criteria for sustaining a rejection under 35 U.S.C. 103(a) over Terry have been satisfied with respect to claim 33. Moreover, none of the criteria for sustaining a rejection under 35 U.S.C. 103(a) over Terry have been satisfied with respect to claims 65 for at least the same reasons that apply to claim 33.

Q. Rejection of Claims under 35 U.S.C. § 103(a) over Roddy

Claims 33, 38, 61, 63 – 64, 68, 76, 99 and 101 – 102 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,457,524 to Roddy (“Roddy”). This rejection is respectfully traversed.

Claims 38, 63 – 64, 68, 76, 99 and 101 – 102 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 and 61, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose,

propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 61 depends from claim 33 and therefore includes all of the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Roddy does not constitute prior art that renders obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Roddy does not render obvious a treating fluid composition that includes any of the zeolites and polymers in the Markush groups recited in claim 33 because none of the three criteria for sustaining a rejection under 35 U.S.C. 103(a) over Roddy have been satisfied with respect to claim 33.

Roddy discloses cement compositions that include cement and a flow enhancing additive, and methods for the use of such compositions. The flow enhancing additive is a particulate solid material with a flow inducing polar chemical absorbed thereon. In one example, the particulate solid material can be zeolite, and the zeolite carries the flow inducing polar chemical. (Col. 4, lines 38 – 42).

However, Roddy is completely devoid of disclosure as to the type of zeolite, and more particularly, to the zeolites recited in claim 33. Moreover, selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Roddy because it is known to those of ordinary skill in the art that different zeolites have different properties. It is

known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPDS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claim 33 would not have been an obvious or routine design choice.

Moreover, claim 33 requires a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Roddy for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Roddy fails to disclose, motivate or suggest all of the limitations of claim 33, and therefore a required element of the present rejection under 35 U.S.C. 103(a) over Roddy has not been met with respect to claim 33.

Further, Roddy fails to suggest or motivate a modification of his disclosure so as to provide a treating fluid composition as recited in claim 33. Neither Roddy nor the current Office Action describes a reason why a person of ordinary skill in the art would modify the disclosure of Roddy to provide the treating fluids described in claim 33. Further, there could be no reasonable expectation of success of providing such a treating fluid composition from the disclosure of Roddy for at least the reason that there is no suggestion or motivation for modification of the disclosure of Roddy. Accordingly, Applicants submit that Roddy fails to satisfy the remaining requirements of a rejection under 35 U.S.C. 103(a) of claim 33.

In view of the foregoing, Applicants respectfully submit that none of the criteria for sustaining a rejection under 35 U.S.C. 103(a) over Roddy have been satisfied with respect to claim 33. Moreover, none of the criteria for sustaining a rejection under 35 U.S.C. 103(a) over Roddy have been satisfied with respect to claim 61 for at least the same reasons that apply to claim 33.

R. Rejection of Claims under 35 U.S.C. § 103(a) over Cross

Claims 33, 39 – 40, 68 and 77 – 78 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 2,094,316 to Cross et al. (“Cross”). This rejection is respectfully traversed.

Claims 39, 68, and 77 – 78 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 and 40, Applicants note that claim 33 is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 40 depends from claim 33 and therefore includes all of the foregoing elements.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the polymer hydroxyethylcellulose is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 33. Hydroxyethylcellulose is a polymer listed in the Markush group of polymers recited in claim 33. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

As indicated in the Office Action, Cross does not constitute prior art that renders obvious a treating fluid composition that includes the zeolite clinoptilolite and the polymer hydroxyethylcellulose. Applicants further submit that Cross does not anticipate or render obvious a treating fluid composition that includes any of the zeolites and polymers in the

Markush groups recited in claim 33 because none of the three criteria for sustaining a rejection under 35 U.S.C. 103(a) over Cross have been satisfied with respect to claim 33.

Cross describes drilling muds that contain from 1% to 10% of a clay that contains a large amount of base exchange zeolite. (Page 1, line 23 – 32). Cross refers to such a clay as a “zeolitic clay.” However, Cross fails to describe the type of zeolite present in the clay. Moreover, selection of a zeolite as recited in the present claims would not be suggested or motivated by the disclosure of Cross because it is known to those of ordinary skill in the art that different zeolites have different properties. It is known to those of ordinary skill in the art that the reason for selecting different zeolites, as well as a reason for synthesizing different zeolites, is that each has different properties, some of which properties are desirable for certain applications, while other properties are desirable for other applications.

As noted above, as of 2002, the JCPDS – International Centre for Diffraction Data, had identified 1,214 synthetic zeolites from 105 classifications, and 278 natural zeolites from 77 subgroups in 45 classifications. Of the numerous possibilities, selection of the zeolite as described in claim 33 would not have been an obvious or routine design choice.

Moreover, claim 33 requires a specific polymer selected from the recited group. There is no disclosure, motivation or suggestion in Cross for a treating fluid composition that includes a zeolite selected from the recited group, a polymer selected from the recited group, and a carrier fluid.

In view of the foregoing, Applicants respectfully submit that Cross fails to disclose, motivate or suggest all of the limitations of claim 33, and therefore a required element of the present rejection under 35 U.S.C. 103(a) over Cross has not been met with respect to claim 33.

Further, Cross fails to suggest or motivate a modification of his disclosure so as to provide a treating fluid composition as recited in claim 33. Neither Cross nor the current Office Action describes a reason why a person of ordinary skill in the art would modify the disclosure of Cross to provide the treating fluids described in claim 33. Further, there could be no reasonable expectation of success of providing such a treating fluid composition from the disclosure of Cross for at least the reason that there is no suggestion or motivation for modification of the disclosure of Cross. Accordingly, Applicants submit that Cross fails to satisfy the remaining requirements of a rejection under 35 U.S.C. 103(a) of claim 33.

In view of the foregoing, Applicants respectfully submit that none of the criteria for sustaining a rejection under 35 U.S.C. 103(a) over Cross have been satisfied with respect to claim 33. Moreover, none of the criteria for sustaining a rejection under 35 U.S.C. 103(a) over Cross have been satisfied with respect to claim 40 for at least the same reasons that apply to claim 33.

S. Obviousness-type Double Patenting Rejection over Reddy '767

Claims 33 – 34, 39, 68 – 69, 71 and 77 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,889,767 to Reddy et al. ("Reddy '767). This rejection is respectfully traversed.

Claims 39, 68 – 69, 71 and 77 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 and 34, Applicants note that MPEP § 804 requires that:

- (a) the rejected claim "define an invention that is merely an obvious variation of an invention claimed in the patent";
- (b) "any analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 USC § 103 obviousness determination", which requires application of the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966); and
- (c) any obviousness-type double patenting rejection should make clear: (i) The differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and (ii) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

MPEP § 804 at p. 800-22.

In support of the obviousness-type double patenting rejection of claims 33 and 34 over claim 7 of Reddy '767, the Examiner stated that

Claim 7 of the patent discloses a composition having a zeolite in a carrier used in well completion – this meets the limitations of the rejected claims, so of course renders them obvious to one of ordinary skill in the art.

Applicants respectfully submit, however, that claim 7 does not meet the limitations of claims 33 and 34, and that the conclusory statement that claim 7 of Reddy '767 "of course renders [the claims] obvious" is insufficient to satisfy the requirements of MPEP § 804.

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claim 34 depends from claim 33, and therefore includes at least the foregoing elements.

Claim 7 of Reddy '767 is drawn to a method of cementing in a subterranean formation that includes forming a dry cement composition, forming a pumpable slurry using the cement composition, pumping the slurry into the subterranean formation, and allowing the slurry to set. The dry cement composition according to claim 7 of Reddy '767 includes a desegregating agent that is a particulate substrate selected from the group consisting of precipitated silica, zeolite, talcum, diatomaceous earth, fuller's earth, and has a polar molecule producing chemical disposed thereon. Thus, even if zeolite is used as the desegregating agent in the dry cement composition, claim 7 of Reddy '767 clearly requires that the zeolite has a polar molecule producing chemical disposed thereon.

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant

claims are obvious variations of the invention defined in the claim 7 of Reddy '767. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33 and 34 over claim 7 of Reddy '767 has not been established.

Applicants further submit, however, that an analysis of the currently rejected claims under the guidelines of a 35 USC § 103 obviousness determination would fail – on multiple grounds – to show that the subject matter claimed in claims 33 and 34 is an obvious variation of the subject matter claimed in claim 7 of Reddy '767. To name but a few of the grounds for such failure, Applicants note that Reddy '767 describes using zeolite as a carrier for a polar molecule producing chemical, which is a required element of claim 7, and also that Reddy '767 describes using the zeolite carrier to form a cement composition, which then must set in a subterranean formation. There is no disclosure, motivation or suggestion in Reddy '767, and none is provided in the current Office Action, for modifying a chemical-carrying zeolite, designed for use in a cement composition, for use in a treating fluid as described in claims 33 and 34.

In view of the foregoing, Applicants respectfully submit that the criteria set forth in MPEP §804 for supporting the provisional obviousness-type double patenting rejection have not been and cannot be satisfied, and Applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 33 and 34 over claim 7 of Reddy '767 be withdrawn.

T. Obviousness-type Double Patenting Rejection over Application No. 10/315,415

Claims 33 – 34, 38 – 40, 68 – 69, 71, and 76 – 78 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims 1 – 2, 39 – 40, 58 and 65 of copending Application No. 10/315,415 (“the ‘415 application”). This rejection is respectfully traversed.

Claims 38, 39, 68 – 69, 71 and 76 – 78 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33, 34 and 40, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of

clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claims 34 and 40 each depend from claim 33, and therefore include at least the foregoing elements.

As allowed, each of claims 1, 39 and 58 of the '415 application are independent, and each is drawn to a method of performing cementing operations that includes preparing a cement composition, placing the cement composition in a subterranean zone, and allowing the cement composition to set therein. The cement composition includes cementitious material, water, and zeolite. The zeolite is selected from the group consisting of analcime (hydrated sodium aluminum silicate); chabazite (hydrated calcium aluminum silicate); harmotome (hydrated barium potassium aluminum silicate); heulandite (hydrated sodium calcium aluminum silicate); laumontite (hydrated calcium aluminum silicate); mesolite (hydrated sodium calcium aluminum silicate); natrolite (hydrated sodium aluminum silicate); phillipsite (hydrated potassium sodium calcium aluminum silicate); scolecite (hydrated calcium aluminum silicate); stellerite (hydrated calcium aluminum silicate); stilbite (hydrated sodium calcium aluminum silicate); and thomsonite (hydrated sodium calcium aluminum silicate).

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1 – 2, 39 – 40, 58 and 65 of the

‘415 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33, 34 and 40 over claims 1 – 2, 39 – 40, 58 and 65 of the ‘415 application has not been established.

Applicants further submit, however, that an analysis of the claims under the guidelines of a 35 USC § 103 obviousness determination would fail – on multiple grounds – to show that the subject matter claimed in claims 33, 34 and 40 is an obvious variation of the subject matter claimed in claims 1 – 2, 39 – 40, 58 and 65 of the ‘415 application.

To name but a few of the grounds for such failure, Applicants note that the ‘415 application describes using zeolite, and a cementitious material, to form a cementing composition that will set in wellbore. There is no disclosure, motivation or suggestion in the ‘415 application and none is provided in the current Office Action, for modifying the cementing composition recited in claims 1 – 2, 39 – 40, 58 and 65 of the ‘415 application to correspond to a treating fluid as described in claims 33, 34 and 40.

Furthermore, Applicants note that the ‘415 application was allowed without requiring a terminal disclaimer over the present application. Thus, Applicants submit that the claims to cementing compositions recited in the ‘415 application do not meet the criteria set forth in MPEP §804 for supporting the provisional obviousness-type double patenting rejection of claims 33, 34 and 40.

In addition to the foregoing deficiencies in the present obviousness-type double patenting rejection, it appears that the Examiner is failing to follow the mandate of MPEP § 2141, which requires that “[t]he references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention”. MPEP § 2141 at p. 2100-120. In addition to the mandate of MPEP § 2141, there are numerous decisions cautioning against the use of hindsight, for example:

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

W. L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

The district court improperly determined that the [claimed] subject matter ... was obvious: it failed to make the Graham inquiries, it improperly focused on what was obvious to the inventor, it engaged in hindsight analysis, and it considered evidence that was not prior art.

Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 796 F.2d 443, 230 USPQ 416 (Fed. Cir. 1986).

Applicants respectfully submit that the present Office Action failed to meet the criteria set forth in MPEP §804 for supporting the provisional obviousness-type double patenting rejection of claims 33, 34 and 40, and improperly engaged in hindsight analysis in violation of MPEP §2141. Applicants further submit, however, that even if hindsight were allowed, application of such hindsight would not result in the conclusion that the subject matter of each of claims 33, 34 and 40 is an obvious variation of the subject matter of claims 1 – 2, 39 – 40, 58 and 65 of the ‘415 application.

In view of the foregoing, Applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 33, 34 and 40 over claims 1 – 2, 39 – 40, 58 and 65 of the ‘415 application be withdrawn.

T. Obviousness-type Double Patenting Rejection over Application No. 10/727,370

Claims 33 – 35, 38 – 40, 44, 68 – 70, 76 – 78 and 82 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 4, 10 – 11, and 23 of copending Application No. 10/727,370 (“the ‘370 application). This rejection is respectfully traversed.

Claims 38, 39, 68 – 70, 76 – 78 and 82 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35 and 40, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and

thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claims 34, 35 and 40 each depend from claim 33, and therefore include at least the foregoing elements.

As published, claim 1 of the '370 application is independent, and is drawn to a method of performing drilling operations comprising: drilling a wellbore with a mud; introducing a wellbore treating fluid comprising zeolite and at least one carrier fluid into the wellbore; and forming a mass by allowing the wellbore treating fluid to come into contact with the mud.

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1 – 4, 10 – 11, and 23 of the '370 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33 – 35 and 40 over claims 1 – 4, 10 – 11, and 23 of the '370 application has not been established.

Even assuming that a basis for the present provisional obviousness-type double patenting had been established, it appears that such basis would rely on improper hindsight analysis, particularly in view of the requirement in claims 1 – 4, 10 – 11, and 23 of the '370 application of forming a mass by allowing the wellbore treating fluid to come into contact with the mud.

In view of the foregoing, Applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 33 – 35 and 40 over claims 1 – 4, 10 – 11, and 23 of the '370 application be withdrawn.

In the event that the Examiner maintains the provisional double patenting rejection in the instant application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the “provisional” double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. • MPEP § 804, p. 800-19.

U. Obviousness-type Double Patenting Rejection over Application No. 10/738,199

Claims 33 – 35, 39 – 40, 44, 68 – 71, 77 – 78 and 82 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 13 – 14, 16, 19, 30 – 31, 33 and 36 – 37 of copending Application No. 10/738,199 (“the ‘199 application). This rejection is respectfully traversed.

Claims 39, 68 – 71, 77 – 78 and 82 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35, 40 and 44, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate,

polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claims 34, 35, 40 and 44 depend from claim 33, and therefore include at least the foregoing elements.

As published, claims 1, 36 and 37 of the '199 application are independent, and each of the claims in the '199 application currently applied depends from one of these independent claims.

Claims 1 and 36, and their respective dependent claims, are drawn to a method of performing drilling operations that includes introducing a wellbore treating fluid comprising zeolite and at least one carrier fluid into a wellbore, introducing a subsequent composition comprising at least one activator into the wellbore to displace all but a remaining portion of the wellbore treating fluid from the wellbore; and contacting the zeolite in the remaining portion of the wellbore treating fluid with the at least one activator.

Claim 37 is drawn to a method of performing drilling operations that includes introducing a wellbore treating fluid comprising zeolite, at least one activator, at least one retarder and at least one carrier fluid into the wellbore; and introducing a subsequent composition into the wellbore to displace all but a remaining portion of the wellbore treating fluid from the wellbore.

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1, 13 – 14, 16, 19, 30 – 31, 33 and 36 – 37 of the '199 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33 – 35, 40 and 44 over claims 1, 13 – 14, 16, 19, 30 – 31, 33 and 36 – 37 of the '199 application has not been established.

Even assuming that a basis for the present provisional obviousness-type double patenting had been established, it appears that such basis would rely on improper hindsight analysis, particularly in view of the requirement in claims 1, 13 – 14, 16, 19, 30 – 31, 33 and 36 – 37 of the '199 application for the presence of an activator.

In view of the foregoing, Applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 33 – 35, 40 and 44 over claims 1, 13 – 14, 16, 19, 30 – 31, 33 and 36 – 37 of the ‘199 application be withdrawn.

In the event that the Examiner maintains the provisional double patenting rejection in the instant application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the “provisional” double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804, p. 800-19.

V. Obviousness-type Double Patenting Rejection over Application No. 10/795,158

Claims 33 – 35, 37 – 40, 52 – 54, 65, 68 – 71, 75 – 78, 90 – 92 and 103 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 3, 7 – 8, 11, 20, 22, 33 – 35, 39 – 40, 43, 52 and 54 of copending Application No. 10/795,158 (“the ‘158 application”). This rejection is respectfully traversed.

Claims 37 – 39, 52, 68 – 71, 75 – 78, 90 – 92 and 103 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 35, 40 53, 54 and 65, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya

gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claims 33 – 35, 40, 53, 54 and 65 depend from claim 33, and therefore include at least the foregoing elements.

The current Office Action is devoid of the “clear” showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1 – 3, 7 – 8, 11, 20, 22, 33 – 35, 39 – 40, 43, 52 and 54 of the ‘158 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33 – 35, 40, 53, 54 and 65 over claims 1 – 3, 7 – 8, 11, 20, 22, 33 – 35, 39 – 40, 43, 52 and 54 of the ‘158 application has not been established.

Furthermore, Applicants note that the claims of the ‘158 application have not yet been examined. Thus, Applicants submit that the present provisional obviousness-type double patenting rejection is premature as amendments to the claims in either the ‘158 application or the present application are still possible. Thus, if the Examiner maintains the provisional double patenting rejection in the present application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the “provisional” double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804, p. 800-19.

W. Obviousness-type Double Patenting Rejection over Application No. 10/816,034

Claims 33 – 34, 39 – 40, 44, 52 – 54, 68 – 69, 71, 77 – 78, 82, and 90 – 92 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting

as being unpatentable over claims 1 – 3, 14, 18, 50 – 52 and 65 of copending Application No. 10/816,034 (“the ‘034 application”). This rejection is respectfully traversed.

Claims 39, 52, 68 – 69, 71, 77 – 78, 82 and 90 – 92 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 34, 40 44, 53 and 54, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claims 34, 40 44, 53 and 54 depend from claim 33, and therefore include at least the foregoing elements.

As published, claims 1 and 52 of the ‘034 application are independent. Each of the independent claims requires a cement composition comprising: a mixing fluid; a base blend comprising zeolite and cementitious material; and proportioned fluid loss control additives, which proportioned fluid loss additives comprise at least a first fluid loss additive having a first molecular weight and at least a second fluid loss additive having a second molecular weight, which second molecular weight is less than the first molecular weight, and which first fluid loss additive and second fluid loss additive are present in the base blend in a ratio of about 1:5.67.

The current Office Action is devoid of the “clear” showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1 – 3, 14, 18, 50 – 52 and 65 of the ‘034 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33, 34, 40 44, 53 and 54 over claims 1 – 3, 14, 18, 50 – 52 and 65 of the ‘034 application has not been established.

Even assuming that a basis for the present provisional obviousness-type double patenting had been established, it appears that such basis would rely on improper hindsight analysis. In view of the foregoing, Applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 33 – 35, 40 and 44 over claims 1, 13 – 14, 16, 19, 30 – 31, 33 and 36 – 37 of the ‘199 application be withdrawn.

Furthermore, Applicants note that the claims of the ‘034 application have not yet been examined. Thus, Applicants submit that the present provisional obviousness-type double patenting rejection is premature as amendments to the claims in either the ‘034 application or the present application are still possible. Thus, if the Examiner maintains the provisional double patenting rejection in the present application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the “provisional” double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804, p. 800-19.

X. Obviousness-type Double Patenting Rejection over Application No. 10/822,459

Claims 33 – 35, 39 – 40, 44, 68 – 71, 77 – 78 and 82 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 3, 14, 20 – 21, 23, 26 and 33 – 35 of copending Application No. 10/822,459 (“the ‘459 application”). This rejection is respectfully traversed.

Claims 39, 52, 68 – 71, 77 – 78 and 82 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, Applicants note that the requirements of

MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

Claim 33, and its dependent claims, are drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

As published, claims 1, 14, 26 and 33 of the '459 application are independent. Each of the independent claims requires a composition that includes zeolite having a mean particle size less than or equal to 100 microns, an activator, an organic acid or salt thereof, and a carrier fluid, which composition can set in a wellbore.

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1 – 3, 14, 20 – 21, 23, 26 and 33 – 35 of the '459 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection over claims 1 – 3, 14, 20 – 21, 23, 26 and 33 – 35 of the '459 application has not been established.

Applicants further submit, however, that an analysis of the claims under the guidelines of a 35 USC § 103 obviousness determination would fail – on multiple grounds – to show that the

subject matter claimed in claims 33, and its dependent claims is an obvious variation of the subject matter claimed in claims 1 – 3, 14, 20 – 21, 23, 26 and 33 – 35 of the ‘459 application.

To name but a few of the grounds for such failure, Applicants note that the composition claimed in the ‘459 application requires an activator and an organic salt, and that the composition that will set in wellbore. There is no disclosure, motivation or suggestion in the ‘459 application and none is provided in the current Office Action, for modifying the composition to correspond to a treating fluid as described in claim 33 of the present application.

Furthermore, Applicants note that the ‘459 application was allowed without requiring a terminal disclaimer over the present application. Thus, Applicants submit that the claims to cementing compositions recited in the ‘459 application do not meet the criteria set forth in MPEP §804 for supporting the present provisional obviousness-type double patenting rejection.

In addition to the foregoing deficiencies in the present obviousness-type double patenting rejection, it appears that the Examiner is failing to follow the mandate of MPEP § 2141, which requires that “[t]he references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention”. MPEP § 2141 at p. 2100-120. In addition to the mandate of MPEP § 2141, there are numerous decisions cautioning against the use of hindsight, for example:

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

W. L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

The district court improperly determined that the [claimed] subject matter ... was obvious: it failed to make the Graham inquiries, it improperly focused on what was obvious to the inventor, it engaged in hindsight analysis, and it considered evidence that was not prior art.

Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 796 F.2d 443, 230 USPQ 416 (Fed. Cir. 1986).

Applicants respectfully submit that the present Office Action failed to meet the criteria set forth in MPEP §804 for supporting the present provisional obviousness-type double

patenting, and improperly engaged in hindsight analysis in violation of MPEP §2141. Applicants further submit, however, that even if hindsight were allowed, application of such hindsight would not result in the conclusion that the subject matter of claims 33 and its dependent claims is an obvious variation of the subject matter of claims 1 – 3, 14, 20 – 21, 23, 26 and 33 – 35 of the ‘459 application.

In view of the foregoing, Applicants respectfully request that the present provisional obviousness-type double patenting rejection of claim 33 and its dependent claims over claims 1 – 3, 14, 20 – 21, 23, 26 and 33 – 35 of the ‘459 application be withdrawn.

Y. Obviousness-type Double Patenting Rejection over Application No. 10/901,507

Claims 33 – 34, 39 – 40, 44, 68 – 69, 77 – 78 and 82 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 10 – 11, 13, 34, 37 – 38, 55, 59 and 62 – 63 of copending Application No. 10/901,507 (“the ‘507 application”). This rejection is respectfully traversed.

Claims 39, 68 – 69, 77 – 78 and 82 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 34, 40 and 44, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

The current Office Action is devoid of the “clear” showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims 1, 10 – 11, 13, 34, 37 – 38, 55, 59 and 62 – 63 of the ‘507 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection over claims 1, 10 – 11, 13, 34, 37 – 38, 55, 59 and 62 – 63 of the ‘507 application has not been established.

However, Applicants note that the ‘507 application has not yet been published. Applicants wish to maintain the secrecy of the claims of the ‘507 application until such time as the application has been published. Accordingly, at the present time and in the present response, Applicants will not address the claims of the ‘507 application because doing so would nullify the present secrecy the claims of the ‘507 application.

At the present time, Applicants submit that the present provisional obviousness-type double patenting rejection is premature as amendments to the claims in either the '507 application or the present application are still possible.

Further, if the Examiner maintains the provisional double patenting rejection in the present application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804, p. 800-19.

Z. Obviousness-type Double Patenting Rejection over Application No. 10/939,902

Claims 33 – 34, 39 – 40, 68 – 69 and 77 – 78 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 11 – 12, 23, 33 – 34, 47, 55 – 56, 65, 73 – 74 and 98 of copending Application No. 10/939,902 ("the '902 application"). This rejection is respectfully traversed.

Claims 39, 68 – 69 and 77 – 78 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 34 and 40, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (*See* MPEP § 804 at p. 800-20).

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in claims 33 – 34 and 40 are obvious variations of the inventions defined in claims 1, 11 – 12, 23, 33 – 34, 47, 55 – 56, 65, 73 – 74 and 98 of the '902 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection over 1, 11 – 12, 23, 33 – 34, 47, 55 – 56, 65, 73 – 74 and 98 of the '902 application has not been established.

However, Applicants note that the '902 application has not yet been published. Applicants wish to maintain the secrecy of the claims of the '902 application until such time as the application has been published. Accordingly, at the present time and in the present response, Applicants will

not address the claims of the '902 application because doing so would nullify the present secrecy the claims of the '902 application.

At the present time, Applicants submit that the present provisional obviousness-type double patenting rejection is premature as amendments to the claims in either the '902 application or the present application are still possible.

Further, if the Examiner maintains the provisional double patenting rejection in the present application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804, p. 800-19.

AA. Obviousness-type Double Patenting Rejection over Application No. 10/954,116

Claims 33 – 34, 39 – 40, 44, 68 – 69, 77 – 78 and 82 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 11, 12, 19 and 20 of copending Application No. 10/954,116 ("the '116 application"). This rejection is respectfully traversed.

Claims 39, 68 – 69, 77 – 78 and 72 have been canceled for reasons unrelated to the present rejection. Regarding the remaining claims, namely, claims 33 – 34, 40 and 44, Applicants note that the requirements of MPEP § 804 noted above also apply to provisional rejections over co-pending patent applications. (See MPEP § 804 at p. 800-20).

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in claims 33, 34, 40 and 44 are obvious variations of the inventions defined in claims 1, 11, 12, 19 and 20 of the '116 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection over claims 1, 11, 12, 19 and 20 of the '116 application has not been established.

However, Applicants note that the '116 application has not yet been published. Applicants wish to maintain the secrecy of the claims of the '116 application until such time as the application has been published. Accordingly, at the present time and in the present response, Applicants will not address the claims of the '116 application because doing so would nullify the present secrecy of the claims of the '116 application.

At the present time, Applicants submit that the present provisional obviousness-type double patenting rejection is premature as amendments to the claims in either the '116 application or the present application are still possible.

Further, if the Examiner maintains the provisional double patenting rejection in the present application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804,

AB. Obviousness-type Double Patenting Rejection over Application No. 11/001,442

Claims 33 – 34 and 44 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4 and 16 of copending Application No. 11/001,442 ("the '442 application"). This rejection is respectfully traversed.

Claim 33 as presented herein is drawn to a treating fluid composition comprising a zeolite, a polymer and a carrier fluid. The zeolite is selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite. The polymer is selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar,

hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone.

Claims 34 and 44 depend from claim 33, and therefore include at least the foregoing elements.

In contrast, claim 16 of the '442 application is drawn to a cement composition that includes cement, a desegregating agent and water. Claim 16 does not even require a zeolite, nor a polymer as described in claims 33, 34 and 44.

Claim 4 of the '442 application is drawn to a cement composition that includes cement and a desegregating agent that is a particulate substrate selected from the group consisting of precipitated silica, zeolite, talcum, diatomaceous earth, fuller's earth, and has a polar molecule producing chemical disposed thereon. Thus, even if zeolite is used as the desegregating agent in the cement composition, claim 4 of the '442 application clearly require that the zeolite has a polar molecule producing chemical disposed thereon.

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the invention defined in claims 4 and 16 of the '442 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of claims 33, 34 and 44 over claims 4 and 16 of the '442 application has not been established.

Applicants further submit, however, that an analysis of the currently rejected claims under the guidelines of a 35 USC § 103 obviousness determination would fail – on multiple grounds – to show that the subject matter claimed in claims 33, 34 and 44 is an obvious variation of the subject matter claimed in claims 4 and 16 of the '442 application. To name but a few of the grounds for such failure, Applicants note that the '442 application describes using zeolite as a carrier for a polar molecule producing chemical, which is a required element of claim 4, and also that the '442 application describes using the zeolite carrier to form a cement composition, which then must set in a subterranean formation. There is no disclosure, motivation or suggestion in the '442 application, and none is provided in the current Office Action, for modifying a

chemical-carrying zeolite, designed for use in a cement composition, for use in a treating fluid as described in claims 33, 34 and 44.

In view of the foregoing, Applicants respectfully submit that the criteria set forth in MPEP §804 for supporting the provisional obviousness-type double patenting rejection have not been and cannot be satisfied, and Applicants respectfully request that the provisional obviousness-type double patenting rejection of claims 33, 34 and 44 over claims 4 and 16 of the '442 application be withdrawn.

AC. Obviousness-type Double Patenting Rejection over Application No. 11/126,626

Claims 33 – 34, 39 – 40 and 44 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 15 – 16, 21, 26, 29 and 31 – 33 of copending Application No. 11/126,626 ("the '626 application"). This rejection is respectfully traversed.

The current Office Action is devoid of the "clear" showing required by MPEP §804 of: (a) the differences between the inventions defined by the conflicting claims; and (b) the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the instant claims are obvious variations of the inventions defined in claims, 15 – 16, 21, 26, 29 and 31 – 33 of the '158 application. Thus, Applicants submit that a basis for the present provisional obviousness-type double patenting rejection of the present claims over claims 1 – 3, 7 – 8, 11, 20, 22, 33 – 35, 39 – 40, 43, 52 and 54 of the '626 application has not been established.

Furthermore, Applicants note that the claims of the '626 application are still subject to amendment. Thus, Applicants submit that the present provisional obviousness-type double patenting rejection is premature. Thus, if the Examiner maintains the provisional double patenting rejection in the present application, Applicants request that at such time that the provisional double patenting rejection is the only rejection remaining, that the Examiner follow the direction provided in MPEP § 804. Namely, that the Examiner withdraw such rejection and permit the instant application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the instant application issues as a patent. MPEP § 804, p. 800-19.

AD. New Claims 106 – 134

Claim 106 and its independent claims are drawn to a treating fluid composition comprising a zeolite selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite; a dispersant selected from the group consisting of sodium naphthalene sulfonate condensed with formaldehyde, sulfonated styrene maleic anhydride copolymer, sulfonated vinyltoluene maleic anhydride copolymer, sulfonated acetone condensed with formaldehyde, lignosulfonates and interpolymers of acrylic acid, allyloxybenzene sulfonate, allyl sulfonate and non-ionic monomers; and a carrier fluid.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and the dispersant sodium naphthalene sulfonate condensed with formaldehyde is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 106. Sodium naphthalene sulfonate condensed with formaldehyde is a dispersant listed in the Markush group of dispersants recited in claim 106. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

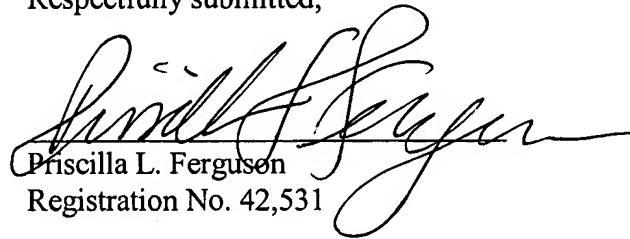
Claim 121 and its independent claims are drawn to a treating fluid composition comprising a zeolite selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite; a surfactant selected from the recited group; and a carrier fluid.

As discussed above, page 5 of the current Office Action states that a treating fluid composition including the zeolite clinoptilolite and a surfactant (which is now (a) in claim 121) is allowable. Clinoptilolite is a zeolite listed in the Markush group of zeolites recited in claim 121. Surfactant (a) is also listed in the Markush group of surfactants recited in claim 121. Applicants respectfully submit that the remaining members of each group are entitled to examination pursuant to MPEP §803.02, and to allowability unless grounds for rejection are provided.

Conclusion

Claims 33 – 36, 40 – 47, 49, 53 – 55, 58, 61 – 62, 65 and 106 – 134 are now pending in the present application. In view of the foregoing remarks, allowance of claims 33 – 36, 40 – 47, 49, 53 – 55, 58, 61 – 62, 65 and 106 – 134 is respectfully requested. The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



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Date: Dec. 7, 2005

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